film and tv post production systems
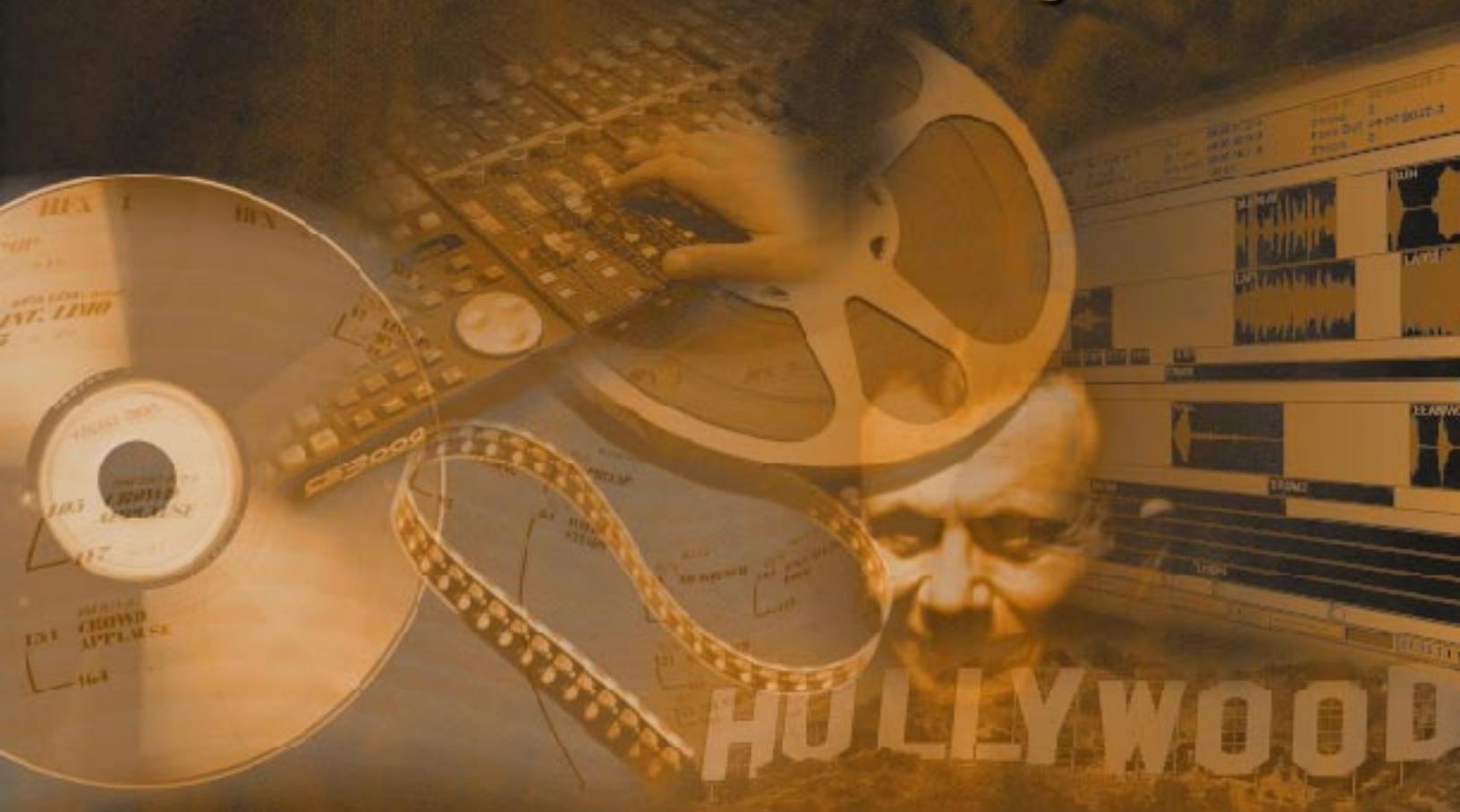
HOLLYWOOD

Euphonix
digital control audio systems

Omnibus

Omnibus, one of Tokyo's premeire television post production facilities, features four Euphonix studios in its newly renovated Minato-ku location.

BUZZ

Buzz Recording

When New York's Buzz, Inc., wanted a great sounding console with digital control, they selected the Euphonix CS2000P for their new commercial audio post suite. Projects include national campaigns for HBO, Pepsi and VISA. Pictured: Sound Designer, Jun Mizumachi.

CRC

CRC

Chicago Recording Company, engineer, Michael Mason (pictured) enjoys the luxury of Euphonix Total Automation™ when working on national commercial campaigns for clients such as State Farm Insurance, Anheuser-Busch and Gatorade.

...the idea

Euphonix was founded in 1988 to bring to market an innovative successor to the traditional mixing console. Euphonix mixing systems apply computer power and software flexibility to enhance, automate, and streamline the mixing process which has traditionally suffered from the limitations of manual control. Euphonix digital control consoles represent a breakthrough in the level of mixing and processing functions that are stored, recalled, and automated. The revolutionary system architecture provides higher audio performance at lower cost than traditional mechanically operated consoles or expensive and premature "all digital" offerings. Digital control provides a significant increase in operational efficiency and flexibility, while maintaining a familiar and easy to use control surface. All controls on the digital control surface may be stored and recalled in less than 1/30th of a second. The purest audio quality is achieved through high-end analog audio circuitry placed under precision digital control. Analog audio is digitally manipulated and passed between inputs, outputs, inserts and monitors without the sonic and financial expense of digital converters. High reliability analog signal processing allows studios to preserve their investments in cabling, interfaces, tape machines, outboard gear, and maintenance practices.

...the design philosophy

The Euphonix digital control mixing system is based on a modular and scaleable architecture.

System hardware and software are designed to grow and adapt to the rapidly changing demands of audio post for film and television. Consoles may be installed to meet today's needs then upgraded over time by adding more channels, buses, and signal processing with plug and play hardware options. Euphonix maintains a tradition of keeping it's installed client base on a constant upgrade path through timely software releases. Each software release typically includes new features, support for new hardware options, and most importantly suggestions from the growing family of post production engineers that use the system every day. As 5.1 and 7.1 channel surround sound for film, DVD, advanced television and other technological developments begin to change the demands placed on audio post production facilities, the unique modular system approach allows facilities to keep up with the pace of the industry.

LIVE TONE

Live Tone

Live Tone Studio, Seoul Korea's first fully equipped independent surround sound film dubbing stage, features a 48 input Euphonix CS2000F film mixing system.

Music Annex
Audio Post Production

Music Annex

Music Annex, located in the heart of San Francisco's ad agency row, specializes in surround sound mixing on their Euphonix CS2000P. Clients include Electronics Arts, DDB Needham and Ketchum Advertising.

SABAN INTERNATIONAL

Saban

Saban Entertainment's award-winning post production facility features Euphonix mixing systems in all four studios designed by architects Studio 440. Their newest project "Turbo: A Power Rangers Movie" will be in theaters this spring.

sound by deluxe
deluxe toronto

Deluxe

One of the most active motion picture post facilities in North America, Deluxe Toronto features a CS2000F in their new THX™ film mixing theatre.

Margarita Mix

This leading LA post house depends on Euphonix instant reset for quick turnaround between sessions. Four Euphonix studios host high-profile clients such as Blue Cross, Blue Shield, Hardy's, Intel and Nestle's.

...post systems

The flexible Euphonix CS3000 system is offered in a wide variety of configurations. Factory options including: renowned dynamics processors, surround sound buses, aux/cue/multitrack/mix bus expansion, and master facilities expansion, may be combined to augment the base system which is scalable from 8 to 104 faders. A unique software package, MixView, operates the audio hardware in tandem with the engineer while automatically adapting to the large number of possible system configurations. Configurations may be specifically tailored to suit recording and mixing for a variety of film and television post production applications in configurations for one, two or three operators.

Soundtrack, NYC

A state-of-the-art facility, the Soundtrack Group operates a total of 15 studios in two major cities. Their New York facility offers feature film and high-end music production in addition to

Soundtrack

Soundtrack, Boston

commercial audio post, while their Boston clientele is predominantly commercial audio post and long format television audio production. A Euphonix CS2000P mixing system can be found in both locations.
Pictured: Bill Bookheim

...machine control

An innovative new machine control interface is included with the CS3000 for locating and cueing multiple audio and video machines. Tape or disk based video, digital audio workstations, audio tape machines, and MIDI sequencers may all be synchronized and controlled with the Euphonix. In a typical multi-machine post production environment the engineer is often moving between the console, the workstation, and even video editors or music sequencers. Euphonix integrates the control of all machines in the system in a way that makes it possible to work from any machine in the system without having to pause to reconfigure.

National

New York City's National Sound (a division of National Video Center/ Recording Studios, Inc) equipped five of their post production suites with Euphonix mixing systems. Their clients include the Discovery Channel, Dreamworks SKG and PBS.

studio ALFRED/KLAASEN

Alfred Klaassen

Located in the center of Amsterdam, provides Audio Post for leading agencies, television commercials, including P.P.G.H and JWT, FHV-Liberty Saatchi & Saatchi and Results/D.D.B.

MARUNI STUDIO

Maruni

Originally focused on music recording, Tokyo's Maruni Studio has continued to expand their post production facilities with the purchase of a third Euphonix CS2000P system.

Mix Magic

Euphonix CS2000P console adds a new dimension to Mix Magic Post Sound in Hollywood. According to engineer Peter Cole (pictured) "To have digital control of analog sound is the ultimate gift... and the automation is first rate."

Galactica

Galactica Studio located at the legendary Famous Cine Lab complex in the heart of Bombay, India, features a 40 fader Euphonix console used primarily for A/V post production and music recording.

Digital Sound

Digital Sound & Picture owner John Ross (pictured) has mixed over 30 motion picture and television soundtracks on his 3 operator CSII film desk. Recent projects include: "Man of the House," "Lost Highway" and "Now and Then"

...midi

The CS Series of consoles include powerful MIDI control features allowing for connection to the studio's MIDI network. MIDI machine control (MMC) is included from the console's transport and locate keys. The SnapShot Recall system also integrates MIDI program change data so console SnapShots may be triggered externally from a sequencer. Each SnapShot can output MIDI program change messages so outboard equipment may be re-programmed when a SnapShot is fired from the console. This becomes even more powerful when SnapShots are triggered from Euphonix SnapShot Automation system, as effects devices can be made to change program number at an easily defined timecode point. Any channel fader may be programmed to output MIDI control data so the engineer may adjust external MIDI equipment using faders and the automation system to store and playback moves. Console objects may also receive MIDI control data allowing external controllers to operate specific controls on the console.

CS3000

Twin Bargraph Meters
Each channel includes twin meters that may be selected to display channel sources, post fader stereo outputs and automation levels.

CleaR Displays™
Optional eight character electronic fader displays can be added to the console in groups of sixteen. Separate fader names can be saved and recalled for each title, making transitions from one project to the next, fast and simple. No more lost or worn out masking tape strips.

VU Meters
The CS3000 includes three selectable mechanical VU meters used to show Left, Right and Mono levels (or LCR) sourced from either of the two main stereo buses. A Phase correlation LED display is also provided.

Mic/Line Preamps
Each channel includes two universal gain amplifiers which accept mic or line level signals. These input sections provide phase reverse, high pass filter, phantom power and variable gain control. Four additional balanced line inputs are included, making a total of six inputs per channel.

Cue/Aux Sends
4 dynamically automated level controls can be sourced from pre or post fader signals and may be assigned to any of eight auxiliary output buses-user selectable to operate as four mono or two stereo sends.

CS3000 Frame
Fitted with comfortable leather arm rests and premium quality faders and rotary controls, the CS3000 frame is modular allowing additional sections to be added in the field. Special metalwork is available to convert single operator frames to dual operator systems. And custom options are available for fitting client equipment, such as reverb remotes, into blank panels.

Master Control Module
The Master Control Module houses the two master stereo output bus faders, monitor output controls, Aux send master controls, oscillator and solo controls, together with 8 selectable bargraph meters.

Moving Faders
The CS3000 is supplied standard with moving lower faders. Optionally, upper moving faders may be ordered. The automation system provides all standard moving fader functions including Monitor Before Record (preview) and Touch Record. Every fader may control a mono or stereo source, doubling the number of signals of the system is capable of controlling. Fader motors may be switched off if required.

Central Control Features
DSC™ (Digital Studio Controller)
All Euphonix systems feature an assignable central control module, the Digital Studio Controller or DSC™. Located in the center of the console, the DSC is home to many of Euphonix most powerful features. Machine control, external MIDI control, SnapShot Recall™, Total Automation™, EQ, Dynamics, input and monitoring matrix, GPI programming, speaker selection, communications microphones, and surround panning all take advantage of these assignable rotary controls and keys to quickly process operator input.

I/O Control Module

Each module includes controls for four channels. All controls are placed within easy reach from a seated position. Channel controls include; twin bargraph meters, Mic/line input gain controls, four cue send controls, upper and lower faders, pan, and mute controls together with "hidden-til-lit" displays of routing and channel status.

Sliding Keyboard Tray

For easy access to the computer keyboard. Additional trays may be ordered.

TrackPanner™

For systems specified with multi-format surround sound mix buses this optional track ball module may be fitted to allow the selected channel's signal to be panned across a surround sound field.

Color Graphics Screen

An active matrix color screen provides real time graphical display of automation moves, EQ curves, dynamics processing, surround panning position, assignable aux levels, and bus master levels. Automation editing and project file management are also supported by this interface.

Assignable Rotary Control Set

Twelve assignable rotary controls work interactively with the screen for selection and adjustment of EQ, dynamics, expanded aux sends and surround panning. Turn a control, hear the changes and watch the graphics change. Simple and fast, the screen displays exact position and name.

Assignable Keys

16 function keys with 8 character labels. Used for SnapShot Recall, expanded monitor input selection, presets, speaker select and MIDI functions.

Channel Select & Routing Keys

Centralized selection of input channels for assignable control is made possible so the engineer never has to leave the monitoring sweet spot. Routing may also be assigned and displayed in this section.

Central Machine Controls

Full set of transport remote controls, which include powerful locate and screen based cue list search functions. Three Sony 9 pin and three MIDI machine control ports are provided along with time code reader / generator with video window inserter.

Automation Keys

Dedicated keys are provided for automation status and for functions such as SnapShot Automation and automation templates.

Assignable moving faders

Assignable moving faders allow the engineer centralized control of the currently selected channel faders.

Source Assign keys

Source keys select any or all of the 6 possible channel input sources (two universal mic/line and 4 line) and assign to either or both of the two stereo buses.

Master Control Panel

Numeric keypad, additional menu driven features and SpinKnob for machine control and scrolling lists.

Starting with the compact digital control surface, Euphonix suits the post suite perfectly. Small yet very dense, a 40 fader system controller fits in less than 5 feet/1.52 meters! The Euphonix provides more inputs in less space without the heat and noise of traditional consoles, because the signal processing electronics can be remotely located (up to 65.62 feet/20 meters away). Euphonix digital control technology is the power that makes the post suite fly! Projects can be completed in less time, more sessions can be run in a day, and clients will come away with better product than ever before.

Sound Quality

The CS3000's clean and transparent analog signal path ensures signals are captured to the storage medium with optimum clarity. The Universal Inputs feature state-of-the-art preamplifiers with ruler-flat frequency response and ultra-low noise and distortion. The channel includes two four-band Equalizers allowing both the source and the monitor signal to be processed!

Real Monitor Mixes

Optional dynamics and filters give the lower faders enough facilities to allow the engineer to make truly powerful mixes while recording. Euphonix automation allows the engineer to include automation of the monitor mix if necessary which is especially useful during the sound effects spotting process. A monitor mix no longer has to be a rough mix; it can now have the full power of a final mix with EQ, dynamics, filters, and automated moving faders!

Layering Effects And Music

Speed is not a luxury when you are on a deadline. Euphonix SnapShot Recall enables the engineer to move from one cue point to

posting on the euphonix

balanced line inputs are optimized for line-level signals, and provide high common mode rejection and plenty of headroom. Euphonix consoles are known worldwide for their noticeably superior sonic quality. This tradition continues with the CS3000.

Recording Configuration

Upper faders usually source mic or line inputs to the multitrack buses or to the channel direct outputs. Since each fader can control a mono or stereo input, it is possible to bring in stereo sources on a single fader, doubling the system's input capability! The standard 4 automated cue/aux send controls per channel are used for providing up to two stereo foldback mixes. Lower faders act as monitor faders, exactly the same as with an in-line system. However, each Euphonix

another instantly; no need to reset the console manually. SnapShot Recall brings back complex mixes with all faders, mutes, pans, EQ, dynamics, routing, aux send levels, and source levels at the touch of a button. Instant recall of the settings makes it a simple matter to go back and make changes to an previous mix. It also makes it possible to A/B compare final mixes on-the-fly with earlier mixes made months ago. A newly included comprehensive off-line editing package provides the engineer with tools to cut, copy, insert, delete and merge one mix with another.

Euphonix dual fader layout lets you keep everything normalled to the console, samplers, tape machines, workstations, everything can be at your fingertips.

Signal Processing

The Euphonix CS3000 is equipped with powerful processing such as the highly acclaimed 4 band equalizers and the optional advanced dynamics processors and filters. Each dynamics processor includes presets to compress, expand, de-ess, limit and gate. Lower faders are typically sourced from the multitrack return, freeing the automated upper faders for mono or stereo effects returns and additional inputs to the mix. Each fader has a dedicated EQ, doubling the number of full function paths in the system during a mix.

Effects Devices

Four send controls in each channel feed 8 aux output buses per channel. The upper faders can be used as a send for lower fader signals using a multitrack bus, which is then routed to outboard effects devices in exactly the same way as an in-line system. Stereo effects devices may be returned on a single fader, which greatly increases input capacity.

Total Automation

Euphonix offers a level of creative possibilities that would not be possible with automation systems limited to just faders and mutes. With MixView software version 3.0 the Euphonix provides expressive dynamic automation of upper and lower channel faders and mutes, stereo panning, aux sends, and EQ. In addition, SnapShots may be fired to timecode allowing instantaneous mix changes to occur at scene changeovers (a feature unique to the Euphonix).

The Revisions and Remixes

Just when you thought it was safe to move on to the next project, the client comes back with new visuals or revisions to the "final" mix. No problem with a Euphonix. Simply reload the material on your machines, reload the mix title on the console and get ready to go to work. Euphonix will recall and reset the mix right back to where you were when you left it yesterday, last week or last year! No need to spend hours recreating a mix to make a small change. With Euphonix Total Automation and SnapShot Recall system engineers get more projects done in a day, with better sound quality and happier clients. What could be better?

Simple To Operate

Euphonix automation is comprehensive, yet very simple to operate. There are dedicated keys for master status, and standard modes such as write, trim, touch record, safe, monitor-before-record, write-to-head, write-to-end and write-through the entire mix. It is even possible to run automation while building in effects or music tracks without interfering with normal operation. Parts of the console may be automated while others may be set to manual. Automation moves are shown on screen for each control in the selected channel.

Surround Sound for Today...and Tomorrow

Home theater sound systems and motion picture sound tracks have raised consumer expectations for multi-channel audio playback. The DVD technology provides a media capable of delivering up to two hours of video programming with 5.1 channel surround sound tracks on a single disk, replacing the VHS home video player. The new broadcast standards, Advanced Television (ATV) and Direct Satellite Broadcasting (DSB) will bring digital video and surround sound directly into the television adding significantly to the growing demand for programming with high quality surround sound. A console that can't keep pace with these trends faces the same destiny as the typewriter. The Euphonix CS series consoles are designed to integrate seamlessly with the Audio Cube expansion module, adding from 4 to 48 multi-format mix buses. Hyper-Surround software defines these buses as stem mix outputs in any surround format for multi-channel mixing.

TM

Dynamics & Filters

The ES108A, an eight channel dynamics option, features a unique architecture employing DSP to precisely compute the gain function. This approach results in a state-of-the-art gain control device with unmatched sonic performance. The ES108A supports SnapShot Recall so functions can be stored and reset at the touch of a button. Users can add their own presets to the library of factory presets. A Euphonix patented color graphical display shows dynamic gain control in action. The Gain Ball™
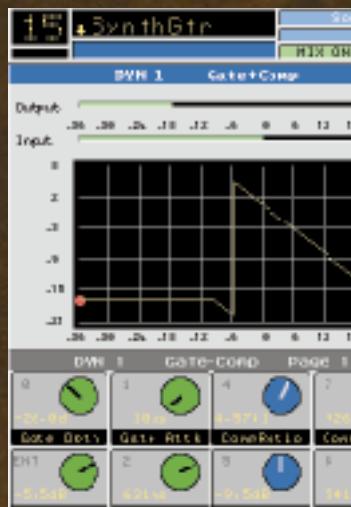
EQ

Each channel has two 4-band digital control equalizers. EQs can be instantly adjusted from one setting to the next using the SnapShot Recall system, or dynamically automated under MixView 3.0. A real-time color graphic display of the EQ response curve, complete with band interaction, sets new standards for ease and speed. EQ is adjusted from the center mix position using the central assignable controls; no more gymnastics are needed to adjust and listen to subtle EQ
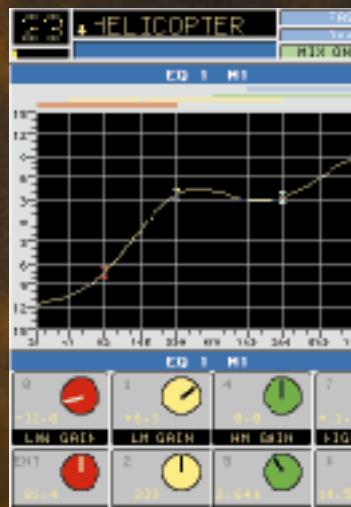
makes set-up, operation, and monitoring of the ES108A's operation fast, simple and intuitive. A red ball tracks the theoretical gain curve in real-time and visually indicates attack and release time adjustments. For the first time– the effect of dynamic processing can be accurately predicted and displayed. Standard gain functions are available to be used simultaneously. A new mode, Dynamic Notch, creates a frequency dependent gain reduction band ideal for use in de-essing or de-ringing, as well as solving many other gain related problems. Each channel of the ES108A includes a pair of digital control filters which can be individually selected to low pass, high pass, band pass, or notch. These 12 dB per octave filters can be placed in the main signal path, or the side chain of the gain control element. The ES108A is so flexible it even allows the operator to select negative compression ratios for very special gain-based effects. The ES108A is more than just a compressor / expander / limiter- it's a creative tool!

adjustments, since the operator is always in the monitoring sweet spot. Critically acclaimed for musicality and flexibility, the Euphonix EQ features the broadest mid-band frequency sweep range and overlap of any analog console EQ. The Lo-Mid band sweeps from 41.2 Hz to 1.3 kHz, and the Hi-Mid band sweeps from 659 Hz to 21.5 kHz both with an adjustable Q from .32 to 11.6. The two independent EQs in each channel can be locked together for precise stereo signal control or placed in series on a mono signal to create complex EQ characteristics, capable of creating effects or solving the most stubborn problems.

Assignable Aux Sends

Adding the optional Audio Cube™, a system can be expanded to include from 4 to 48 additional aux output buses making the total aux sends available a staggering 56! These buses may be configured as aux sends, or as Hyper-Surround buses and are adjusted from the DSC. They are part of the SnapShot Recall system. A future planned upgrade will provide dynamic automation of these send levels.

Euphonix Hyper-Surround is a software interface which provides high resolution pan controls including front and rear pan, focus, divergence, and surround for any assigned fader across any format. Hyper-Surround is an innovative and powerful surround panning and routing system that supports all the main formats, including mono, stereo, LCR, LCRS, Dolby-Digital®, DTS®, HDTV, SDDS® and many others, plus customized formats used in theater and multi-media event spaces. Unique to Euphonix is the ability to simultaneously mix to several different format stems while maintaining identical imaging between different playback formats.

Defining and Selecting a Stem

The optional Audio Cube allows from 4 to 48 multi-format buses to be added to any Euphonix system. For example, suppose there are 32 multi-format buses available. The software allows these to be divided between assignable aux sends and surround mix/record buses. If 8 assignable aux sends are required, this leaves 24 buses available to the Hyper-Surround software. Once the number of buses has been defined, the format for each panner, or stem, is selected from a list of standard surround formats shown on the setup screen. With 24 buses we can configure combinations such as:

- 4 split surround 5.1 stems
- 4 LCRS stems and 4 stereo stems
- 2 LCRS stems, 2 LCR stems, 4 stereo stems and 2 mono stems

Stems may be assigned in any bus order, so buses 1-5 could be LCRSrSl and bus 24 could be the subwoofer channel of that stem. Up to 16 different stems may be configured, named and saved with the *Title*. Keys beneath the DSC's rotary controls allow the fader to route to any combination of the stems, either to a single stem or to multiple stems simultaneously, each with its correct panning and imaging laws. When adjusting the image position of a sound that is assigned to more than one format stem Hyper-Surround automatically calculates the correct move for each stem to maintain correct imaging across all formats! Discrete stereo, LCRS, and 5.1 channel mixes can be created simultaneously saving hours of studio time, and providing more consistent quality to a multi-format project.

Panning the signal

Panning and stem selection are carried out from the DSC's rotary controls and buttons which map up to the active matrix color screen. The screen shows bus audio and power levels, a special diagram of each stem and controls for pan, surround and focus. This interface makes it very simple to move from pan, to EQ, to dynamics control all from the centrally located 'sweet spot'.

Hyper-Surround Panning
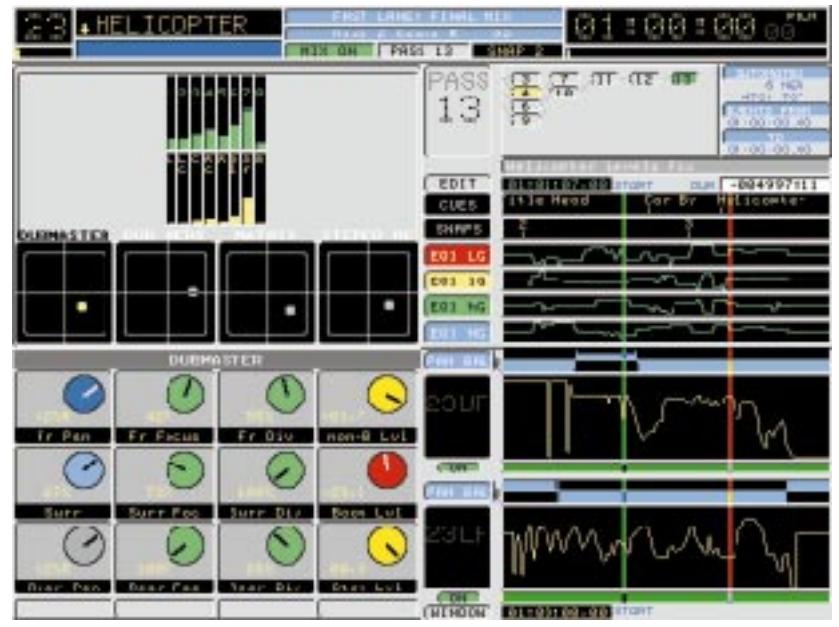
...more time to create

Traditional consoles, even those with "total recall," still require hours of manual knob resetting during a project in order to get back to saved titles and mixes. These mechanically operated systems have never had the ability to recall outboard dynamics and effects processors. Imagine the time saved if it were possible to return to a project in just a minute instead of an hour. An engineer remains continuously creative without suffering from the down time it takes to manually reset the console. Projects would be completed faster than possible with a manual reset console system. All of this is possible today with Euphonix, the only digital control analog audio console that recalls and resets all the major components of a mixing environment automatically. Euphonix title recall resets faders, mutes, pan/bal, aux send levels, EQ settings, dynamics settings, routing, surround panning, MIDI program change for external signal processors, monitor configuration, tape location cues ...Everything instantly!

dynamics processors add noise gating, compression, expansion, ducking, de-essing, and other frequency selective processing functions to every channel. Audio subgroups may be specified in three different configurations: 24 mono (or 12 stereo) subgroups sourced from lower faders, 12 mono, or 6 stereo subgroups sourced from all faders. These configurations can be changed easily in the field. Two stereo outputs, plus PFL, AFL and solo buses completes the bus structure of the system.

...delivers the highest sound quality

The most demanding audio professionals use Euphonix mixing systems because of their exceedingly high sound quality. Audio circuitry is built without compromise, using only the highest grade components, delivering the cleanest audio path possible, while at the same time, providing all the power and flexibility expected of full digital control. All audio signal processing is housed in the Audio Tower so noise, RFI, and crosstalk is minimized. Circuit layout is optimized for maximum audio performance, not limited by the

the benefits of digital control

...more creative possibilities

Euphonix SnapShot Recall™ is a digital "picture" of the console's surface. Within 1/30th second, SnapShot recall will reset the controls to those positions previously stored. It's a powerful tool which frees mixers from banal mechanical tasks and allows for a greater focus to be placed on the sound of the final mix. SnapShot Recall can be used to create multiple mixes and to compare them instantly in real-time. SnapShot Recall allows instant changes of EQ and/or dynamics without being forced to tie up two channels of the mixing system. This frees valuable faders for more inputs to the mix. Euphonix digital control system with SnapShot Recall makes remixing a project easier and faster than ever. Once the title is recalled and the console is reset, you are right back to where you left off, ready to start mixing again without laboring for hours to get "close" to where you were before!

...more routing & processing flexibility

From an operational standpoint, the Euphonix provides a wide range of functionality without compromising user access. Each channel strip features 2 variable gain universal amplifiers and 4 line level inputs. Any of these 6 input sources can be assigned in mono or stereo to either of two long throw faders, one upper and one lower (moving faders available). Two 4 band digital control EQ sections can be placed into the signal paths either as mono or a locked stereo pair. Each channel also has 4 dedicated, dynamically automated auxiliary output controls, selectable as mono or stereo sends to any of 8 dedicated output buses. If more are needed, up to 48 additional send buses may be added at any time. Optional

physical restrictions of an input module as is required in a traditional, mechanical style console.

...assures the highest reliability

High reliability and ease of maintenance is achieved through the combination of analog circuitry, mature software and modular hardware. Audio electronics housed in the Audio Tower are fan cooled and built in removable tray assemblies with local voltage regulation. Design is modular throughout for easy replacement and troubleshooting of all system components. Mix Controller modules are grouped as four channels and can be removed or replaced in seconds. Multiple processors provide independent operation of the Mix Controller (digital control surface), the Audio Tower (analog processing), and the MixView computer. Even in the event the computer is off-line or the digital control surface loses power, the audio output is not interrupted. Optional redundant power supplies provide uninterrupted power under the most difficult conditions.

...prepared for the future

Ready to meet the audio demands of surround-sound required for DTS, Dolby Digital, SDDS, ATV, DSB, DVD, or any other future development, Euphonix Hyper-Surround system provides stereo and surround panning from every channel and fully supports all multi-channel formats in use today. With unique software controlled configuration, Hyper-Surround lets you create custom mix formats up to 32 channels wide, complete with automated panning. The multi-format mix buses used for Hyper-Surround mixing are supplied as an optional hardware module (Audio Cube), which can be added even after installation, protecting one's investment.

specifications

...standard features

- SnapShot Recall- total console reset in less than 1/30th second
- Total Automation of all console controls to timecode
- Dynamic automation of faders, mutes, stereo pan, EQ and aux sends
- Comprehensive MIDI machine control and MIDI program change automation
- High resolution active matrix color graphic display screen
- DSC central control section with dual moving faders
- Two automated long-throw faders (mono or stereo) per channel
- Two automated pan controls per channel
- Two 4-band parametric EQs per channel
- 24 user configurable multi track buses
- Two stereo mix buses
- 4 automated aux sends to 8 aux buses
- Two high-intensity LED bargraph meters (Peak/VU selectable) per channel
- DCA (Digitally Controlled Attenuator) level controllers for high accuracy, wide bandwidth, ultra low noise and distortion
- DCA group master control from any fader
- Pre-wired fully connectorized TT patchbay (premium quality jacks)
- High speed MixView processing platform with hard disk, removable hard drive, and MIDI interface
- 6 inputs (2 universal mic/line, 4 fixed line) per channel
- 5 outputs (3 pre-fader and 2 post-fader) per channel
- Three master VU meters and LED phase correlation display
- 3 programmable stereo monitor outputs that may be linked together for 4 or 6 channel monitoring
- 8 high-intensity LED bargraph master meters
- Software defined control surface allowing feature upgrades

...system options

- **Multi-Format Buses** — Adds 4 to 48 extra multi-format bus feeds for aux/cue sends, mix-minus/IFB feeds, or surround panning buses.

- **Dynamics** — 8 channels of dynamics processing providing simultaneous gate/ expander, compressor/limiter, and hi/lo pass filters. Settings can be stored and recalled as part of a SnapShot for instant recall

- **Master Expander** — Master Facilities Expansion: 64 input monitor matrix, 8 stereo output record matrix, 8 Stereo Speaker Outputs, 3 Communications Microphone Inputs, 16 General Purpose Interface Relays (GPIs), Direct Feeds for ST1 and ST2, Mono Feeds for ST1 and ST2, Comprehensive 288 jack patchbay

- **CleaR Displays** — Channel label electronic alphanumeric Readout, electronic fader labels

- **Hi Rel PSU** — Redundant power supply option

- **Audio routing matrix** — Provides up to 48 input by 48 output routing with computer control

- **Machine Control** — Central machine control synchronizing hub for multi-machine production environments

- **Custom Frames** — Multiple operator systems available on special request

- **PicMix** — Multi-channel Monitoring System

portable demo systems

Euphonix maintains a number of small, portable demo systems for use when making sonic or operational evaluations in studios that may already have a console installed. Call your nearest Euphonix sales and service office to make an appointment for an in-studio test of the CS3000.

Meters
2 VU/Peak meters/ch display's all inputs, stereo post fader signal, MT bus, and automation levels

OUT1,2,3
Insert Sends (Pre-Fader Outs) Shows which sources are sent to inserts

M1& M2 Inputs
Mic or line variable gain, phase rev, phantom, hi pass filter

Cue/Aux ABCD
4 automated sends to 8 buses are sourced individually from any of six inputs (M1,M2,L1,L2,L4). These sends may be linked to follow the upper or lower fader's source and may be configured as 4 mono or 2 stereo pairs.

Upper Mono/Stereo Fader and Pan
Sourced from any or all 6 inputs and feeds post pan/bal to ST1, ST2, Group buses, and DIRect outs

Lower Mono/Stereo Fader and Pan
Sourced from any or all 6 inputs and feeds post pan/bal to ST1, ST2, Group buses, and DIRect outs

training

There are over 350 systems installed worldwide making Euphonix an extremely popular mixing system. This popularity creates a large demand for operator training. Euphonix is committed to providing in-depth training programs through individual offices or via new demo systems made available to areas not directly served by the offices. Euphonix provides a detailed operational manual and one-on-one training for engineers interested in learning the system. The Euphonix web site also includes training resources with on-line versions of the System Overview available for browsing or download.

The Euphonix system is easy to learn, with simple operation of EQ, dynamics, aux sends and automation. Its unique routing is different from in-line systems due to the large number of inputs and outputs available from the console. Most engineers feel at home after a couple of sessions behind the console. Once you master powerful features such as the SnapShot Recall system it is difficult to go back to a traditional analog system. To find out why the Euphonix is so popular and easy to learn, contact any of the Euphonix offices or distributors to schedule training or a self paced tutorial.

web page

Euphonix has been on-line since October 1995 with one of the industry's most informative web sites. Our web-site has over 100 pages of information about the company and the CS range of consoles. The web-site provides a unique up-to-date resource for anyone interested in finding out about Euphonix. There are diagrams, contact and e-mail details, distributor lists, in-depth product brochures and a large industry links page. For up-to-the-minute news about Euphonix check out this very valuable resource.

www.euphonix.com

International Sales and Service

Worldwide Headquarters

Located in the heart of the Silicon Valley, 30 miles south of San Francisco. Headquarters includes manufacturing, administration, marketing, engineering, and service departments. An on-site studio is fitted with a 96 fader CS3000 system with surround sound monitoring for sales, demonstrations and product testing.

Los Angeles

The Los Angeles office is within 30 minutes drive of most major studios. Sales management for the United States, Canada and Pacific Rim countries as well as LA service are located in this office. An on-site studio provides training and demonstrations to clients from all over the world.

New York

Centrally located, the New York office includes a fully equipped demonstration studio and is perfectly situated to serve this thriving metropolis. Sales and service for the Eastern United States are managed from here.

Nashville

Located on the world famous Music Row, the Nashville office is ideally situated for direct access to the country music scene. The office provides sales and service for the South East region of the United States and includes a demonstration studio for training and sales.

London

Our London office provides a European sales and service base for Euphonix. The UK market is served directly from this office while sales in other European countries are managed through distributors.

Tokyo

The new Tokyo office reflects Euphonix commitment to this important market. Like all of our Euphonix offices, the Japanese office includes sales, service and a demonstration studio with an emphasis on engineer training.

awards

TEC AWARD 1996

TEC AWARD 1994

Satis-Fecit 1996

PAR Excellence 1996

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Euphonix
digital control audio systems

Visit our web site: http://www.euphonix.com